

**Strength.
Efficiency.
Safety.**

K3 FILES



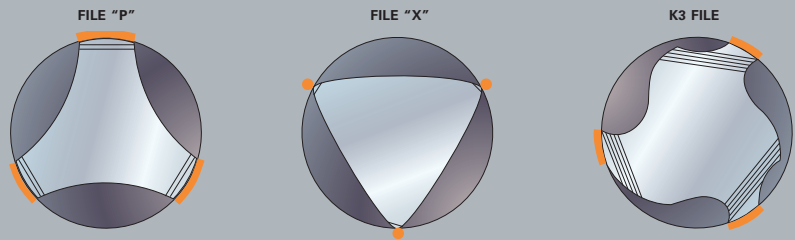
Strength

K3™ is a triple-fluted, asymmetric endodontic file system designed to cut quickly, efficiently and safely, with unparalleled debris removal.



RADIOGRAPH COURTESY OF DR. TONY SOILEAU

The unique, cross-sectional design makes K3 files significantly more resistant to cyclic fatigue than some other rotary files. (Ref 1)



LESS FRICTION, MORE SUPPORT

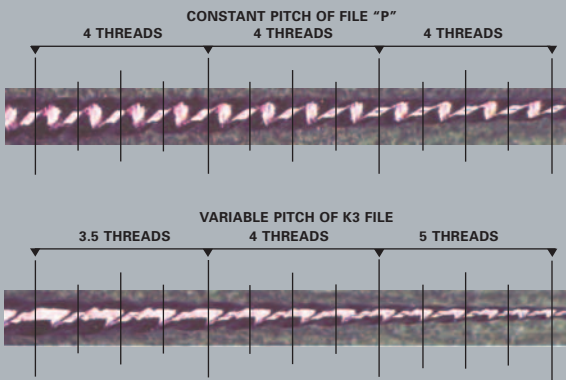
With the recessed trailing edge of the radial land, K3 files minimize frictional resistance. Other nickel-titanium systems have wide radial lands that cause friction and can lead to breakage. K3 files have added mass behind the cutting surface to provide support and maintain integrity. With other systems, blade rollover or cracks can occur during instrumentation.

"My patients depend on me to provide quality care in all aspects of dentistry. I am confident that using K3 files in my practice gives me the most efficient tools and predictable results without compromising safety. K3 files allow me to work comfortably at a pace that my patients are happy with and I am confident in the results."

– Dr. Tony Soileau, Lafayette, LA

VARIABLE PITCH

Many files maintain a constant pitch (distance between cutting edges) through the length of the file. This may cause a "screw-in" effect whereby each successive flute naturally follows the path created by the one before. **The K3 file has a varied pitch that allows debris to effectively channel coronally.** This is important not only during initial cleaning and shaping but also for retreatment.



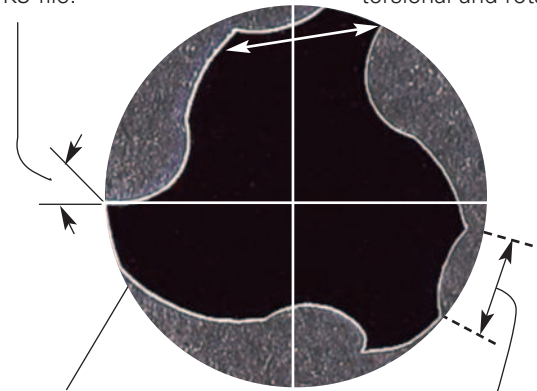
K3 files are more efficient than some other file systems at removing gutta percha in the apical third.

(Ref 2)

ENGINEERED FOR EFFICIENCY

Positive rake angle provides the active cutting action of the K3 file.

Reduced radial land with wide blade support adds peripheral strength to resist torsional and rotary stresses.



The third radial land stabilizes and keeps the instrument centered in the canal and minimizes "over-engagement."

Radial land relief reduces friction on the canal wall.

Efficiency

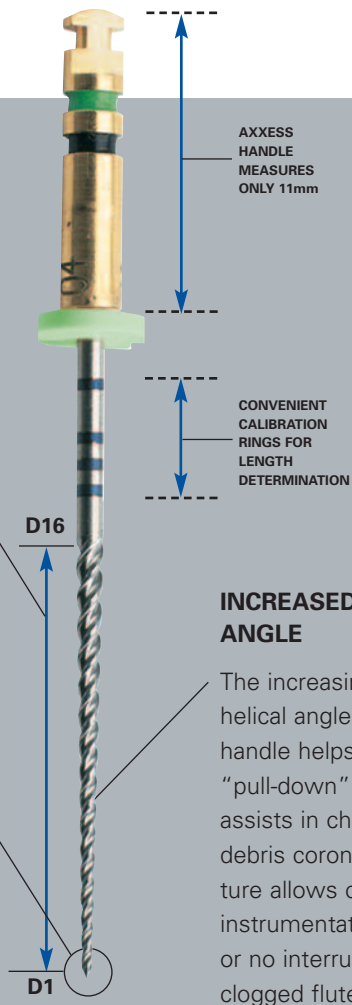
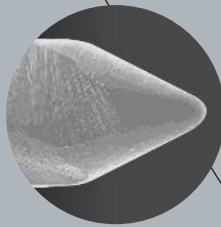
K3 files have been found to leave less smear layer in the apical portion of the canal than some other files. (Ref 3)

VARIABLE CORE DIAMETER

The relationship between the core diameter and the outer diameter varies from D1 to D16 in order to maintain flexibility along the entire working length.

SAFE-ENDED TIP

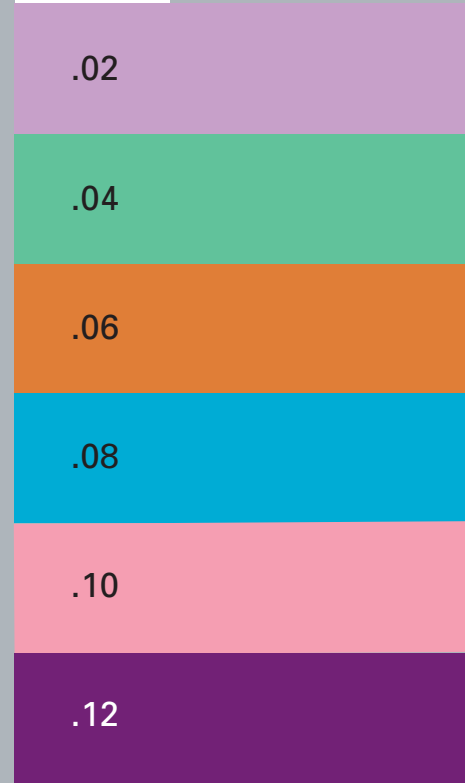
Assists in following the canal shape while minimizing apical transportation.



INCREASED HELICAL ANGLE

The increasing variable helical angle from tip to handle helps reduce the "pull-down" effect and assists in channeling debris coronally. This feature allows continuous instrumentation with little or no interruption from clogged flutes.

TAPER



6 DIFFERENT TAPERS – INFINITE POSSIBILITIES

K3 files are available in 6 different tapers with a multitude of lengths and tip sizes. This allows you to customize your technique for any case from single, straight roots to calcified, curved molars.

Safety

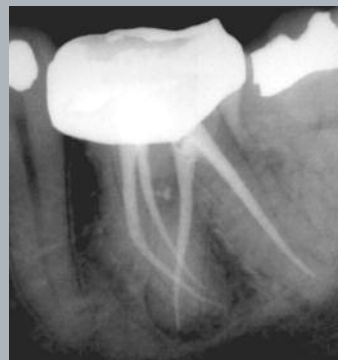
K3 files are able to negotiate even the most challenging S-shape curves. They do so with little or no canal deformation. (Ref 4)



RADIOGRAPH COURTESY OF DR. RICHARD MOUNCE

"By far, in my hands, SybronEndo's K3 files have the best blend of safety, smooth tactile sensation, and cutting efficiency available today, bar none of any rotary nickel-titanium system."

– Dr. Richard Mounce, Portland, OR



RADIOGRAPH COURTESY OF DR. JOSEPH MAGGIO

"The K3 files offer so many different tapers and tip sizes. I am able to use them for almost any case. They work effortlessly as orifice opens and in the smaller tapers they can get around curvatures that were once only negotiated with difficulty by hand files."

– Dr. Joseph D. Maggio, Lisle, IL

FILES SHAPE

K3 files are easily adapted to any technique. With a full range of tapers from .02 to .12, K3 files can address canal shaping by apical tip diameter or by the use of varying tapers.

CLINICAL TIPS

- Establish a glide path with hand files. Confirm patency between all rotary files with a #08 hand file.
- Irrigate copiously, alternating between sodium hypochlorite and SmearClear (17% EDTA containing surfactants).
- Use very light pressure. Never force instruments to working length. When the instrument no longer advances apically, proceed to the next file.

K3 NICKEL-TITANIUM FILES

Taper	Tip	21mm	25mm	30mm	Taper	Tip	21mm	25mm	30mm
.02	15	825-2151	825-2155	825-2150	.06	15	825-6151	825-6155	825-6150
.02	20	825-2201	825-2205	825-2200	.06	20	825-6201	825-6205	825-6200
.02	25	825-2251	825-2255	825-2250	.06	25	825-6251	825-6255	825-6250
.02	30	825-2301	825-2305	825-2300	.06	30	825-6301	825-6305	825-6300
.02	35	825-2351	825-2355	825-2350	.06	35	825-6351	825-6355	825-6350
.02	40	825-2401	825-2405	825-2400	.06	40	825-6401	825-6405	825-6400
.02	45	825-2451	825-2455	825-2450	.06	15-40 Assorted	825-6021	825-6025	
.02	15-40 Assorted	825-2021	825-2025		.06	45	825-6451	825-6455	825-6450
.04	15	825-4151	825-4155	825-4150	.06	50	825-6501	825-6505	825-6500
.04	20	825-4201	825-4205	825-4200	.06	55	825-6551	825-6555	825-6550
.04	25	825-4251	825-4255	825-4250	.06	60	825-6601	825-6605	825-6600
.04	30	825-4301	825-4305	825-4300	.08	25	830-8257	830-8251	830-8255
.04	35	825-4351	825-4355	825-4350	.10	25	830-0257	830-0251	830-0255
.04	40	825-4401	825-4405	825-4400			830-2257	830-2251	830-2255
.04	15-40 Assorted	825-4021	825-4025						
.04	45	825-4451	825-4455	825-4450					
.04	50	825-4501	825-4505	825-4500					

ASSORTED PACKS – K3 files are available in a number of prepackaged assorted packs, which is a perfect way to get started with K3 files or an easy way to set up for a procedure.

K3 PROCEDURE PACKS

830-0621 17mm TAPER TIP .10 25 .08 25 21mm TAPER TIP .06 40 .06 35 .06 30 .06 25	830-0625 17mm TAPER TIP .10 25 .08 25 25mm TAPER TIP .06 40 .06 35 .06 30 .06 25	830-0421 17mm TAPER TIP .10 25 .08 25 21mm TAPER TIP .04 40 .04 35 .04 30 .04 25	830-0425 17mm TAPER TIP .10 25 .08 25 25mm TAPER TIP .04 40 .04 35 .04 30 .04 25
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K3 G-PACKS

830-9921 17mm TAPER TIP .12 25 21mm TAPER TIP .10 25 .08 25 .06 25 .04 25 .02 25	830-9925 17mm TAPER TIP .12 25 25mm TAPER TIP .10 25 .08 25 .06 25 .04 25 .02 25
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K3 VTVT PACKS

830-7721 21mm TAPER TIP .10 25 .08 25 .06 35 .04 30 .06 25 .04 20	830-7725 25mm TAPER TIP .10 25 .08 25 .06 35 .04 30 .06 25 .04 20
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REFERENCES

1. Yao, J.H.; Schwartz, S.A.; Beeson, T.J.: Cyclic fatigue of three types of rotary nickel-titanium files in a dynamic model, J Endod, 32(1):55-57, January 2006.
2. Masiero, A.V.; Barletta, F.B.: Effectiveness of different techniques for removing gutta-percha during retreatment, Int Endod J, 38(1):2-7, January 2005.
3. Kum, K.Y.; Kazemi, R.B.; Cha, B.Y.; Zhu, Q.: Smear layer production of K3 and ProFile Ni-Ti rotary instruments in curved root canals: a comparative SEM study, Oral Surg Oral Med Oral Pathol Oral Radiol Endod, 101(4):536-541, April 2006; Epub October 19, 2005.
4. Yoshimine, Y.; Ono, M.; Akamine, A.: The shaping effects of three nickel-titanium rotary instruments in simulated S-shaped canals, J Endod, 31(5):373-375, May 2005.